

# **Exhibit 4**

# As Played in Court 5/16/23

## Designation List Report



**Chan, Christopher**

**2022-11-29**

Sonos Affirmatives	00:19:12
Google Counters	00:00:56
<b>TOTAL RUN TIME</b>	<b>00:20:07</b>



Documents linked to video:

T128

T130

T138

T139

## Chan\_C - As Played in Court 5/16/23

DESIGNATION	SOURCE	DURATION	ID
11:09 - 11:14	<b>Chan, Christopher 2022-11-29</b> 11:09 Q. Good morning, Mr. Chan. 11:10 A. Good morning. 11:11 Q. Could you please state and spell your full name 11:12 for the record. 11:13 A. Christopher Chan, C-H-R-I-S-T-O-P-H-E-R, 11:14 C-H-A-N.	00:00:14	Chan_C.1
15:03 - 15:05	<b>Chan, Christopher 2022-11-29</b> 15:03 Q. Okay. And you understand that Google has 15:04 designated you to testify on their behalf regarding 15:05 Topics 3 and 4 of this Notice; is that right?	00:00:07	Chan_C.2
15:09 - 15:23	<b>Chan, Christopher 2022-11-29</b> 15:09 THE WITNESS: Yes, I do. 15:10 Q. BY MR. SULLIVAN: Okay. And more specifically, 15:11 you are Google's corporate designee on Topic 3 as it 15:12 relates to: One, Google's strategies for the sale and 15:13 marketing of the accused functionalities and the accused 15:14 hardware products; two, the competitive relationship 15:15 between the parties to the extent there is one; and 3, 15:16 metrics information regarding installs of the accused 15:17 software apps on the accused hardware devices and usage 15:18 of the accused functionalities. 15:19 Is that correct? 15:20 A. Are you reading from part of the document? 15:21 Q. No. I'm actually reading from representations 15:22 from Google's counsel that was filed. 15:23 A. Got it.	00:00:48	Chan_C.3
16:01 - 16:01	<b>Chan, Christopher 2022-11-29</b> 16:01 THE WITNESS: Yes, this is my understanding.	00:00:02	Chan_C.4
16:02 - 16:10	<b>Chan, Christopher 2022-11-29</b> 16:02 Q. BY MR. SULLIVAN: And you are Google's corporate 16:03 designee on Topic 4 as it relates to: One, customer 16:04 feedback, including comments and/or complaints regarding 16:05 the accused functionalities, to the extent such feedback 16:06 exists and is reasonably within Google's possession, 16:07 custody, and control; and two, metrics information 16:08 regarding usage of the accused functionalities. 16:09 Is that correct? 16:10 A. That sounds right.	00:00:28	Chan_C.5

## Chan\_C - As Played in Court 5/16/23

DESIGNATION	SOURCE	DURATION	ID
18:11 - 18:21	<b>Chan, Christopher 2022-11-29</b> 18:11 Q. You were a 18:12 product manager at Google from May 2017 to October of 18:13 2020; is that right? 18:14 A. Yes, that's correct. 18:15 Q. And then you got promoted to senior product 18:16 manager? 18:17 A. Yes, that's correct. 18:18 Q. And that is your current title? 18:19 A. Yes. 18:20 Q. So what products are you responsible for as a 18:21 product manager at Google?	00:00:25	Chan_C.6
18:23 - 19:02	<b>Chan, Christopher 2022-11-29</b> 18:23 THE WITNESS: Are you asking right now or in 18:24 prior months or years? 18:25 Q. BY MR. SULLIVAN: Let's start with when you were 19:01 just a product manager, and then I'll ask about if it's 19:02 changed in your role as senior product manager.	00:00:18	Chan_C.7
19:04 - 19:11	<b>Chan, Christopher 2022-11-29</b> 19:04 THE WITNESS: So when I was a product manager, I 19:05 worked on Google Home Max. 19:06 Q. BY MR. SULLIVAN: Okay. Any other products? 19:07 A. Also I worked on Nest Mini. 19:08 Q. Any other products? 19:09 A. Also I worked on Nest Audio. 19:10 Q. How about Google Home; did you work on that 19:11 product?	00:00:29	Chan_C.8
19:13 - 19:23	<b>Chan, Christopher 2022-11-29</b> 19:13 THE WITNESS: I worked on software features that 19:14 impacted Google Home, but not the hardware product 19:15 itself. 19:16 Q. BY MR. SULLIVAN: Are there any other products 19:17 that we didn't just discuss? 19:18 A. I worked on software features for additional 19:19 products. 19:20 Q. And what were those software features and 19:21 products? 19:22 A. Software features included our group playback 19:23 functionality.	00:00:43	Chan_C.9

## Chan\_C - As Played in Court 5/16/23

DESIGNATION	SOURCE	DURATION	ID
19:24 - 20:02	<b>Chan, Christopher 2022-11-29</b> 19:24 Q. Okay. Any other features? 19:25 A. Our stream transfer functionality. 20:01 Q. Anything else? 20:02 A. Stereo pairing.	00:00:15	Chan_C.10
20:06 - 20:09	<b>Chan, Christopher 2022-11-29</b> 20:06 Q. BY MR. SULLIVAN: Any other features? 20:07 A. Marble. 20:08 Q. And what is "Marble"? 20:09 A. Marble is our on-device assistant technology.	00:00:13	Chan_C.11
20:13 - 20:18	<b>Chan, Christopher 2022-11-29</b> 20:13 A. Marble is a software feature that rings the 20:14 intelligence of the Google assistant onto the device so 20:15 that users have a faster experience. 20:16 Q. And did you work on any other features? 20:17 A. Those were the primary ones that I can remember 20:18 from where I sit now.	00:00:27	Chan_C.12
20:19 - 20:20	<b>Chan, Christopher 2022-11-29</b> 20:19 Q. And what products have you had responsibility 20:20 for as a senior product manager?	00:00:06	Chan_C.13
20:24 - 20:25	<b>Chan, Christopher 2022-11-29</b> 20:24 THE WITNESS: Currently, I am working on Pixel 20:25 tablet.	00:00:03	Chan_C.14
21:22 - 21:23	<b>Chan, Christopher 2022-11-29</b> 21:22 Q. BY MR. SULLIVAN: Okay. Let's turn to the next 21:23 exhibit in the folder. It's Exhibit 1261.	00:00:06	Chan_C.15
21:25 - 22:05	<b>Chan, Christopher 2022-11-29</b> 21:25 and I ask if you recognize that document. 22:01 A. I do recognize this document. 22:02 Q. Can you tell me what it is, please. 22:03 A. This document is a reference to metrics that 22:04 kind of explain usage of cast functionality and multizone 22:05 functionality.	00:00:29	Chan_C.16
25:18 - 25:18	<b>Chan, Christopher 2022-11-29</b> 25:18 Q. Why was Exhibit 1261 created?	00:00:04	Chan_C.17
25:20 - 25:22	<b>Chan, Christopher 2022-11-29</b> 25:20 THE WITNESS: My understanding was that it was 25:21 created as a reference to better understand the metrics	00:00:07	Chan_C.18

## Chan\_C - As Played in Court 5/16/23

DESIGNATION	SOURCE	DURATION	ID
	25:22 that we will be reviewing.		
26:05 - 26:09	<b>Chan, Christopher 2022-11-29</b>	00:00:20	Chan_C.19
	26:05 I'm going to refer to computing devices as		
	26:06 devices such as mobile phones, tablets, laptops,		
	26:07 desktops, and other computing devices.		
	26:08 Is that okay?		
	26:09 A. Sounds good.		
40:04 - 40:05	<b>Chan, Christopher 2022-11-29</b>	00:00:06	Chan_C.20
 T130.2	40:04 Q. BY MR. SULLIVAN: Okay. Let's take a look at		
	40:05 Exhibit 1263. And my first question is going to be: Do		
40:06 - 40:06	<b>Chan, Christopher 2022-11-29</b>	00:00:05	Chan_C.21
	40:06 you recognize this document?		
40:07 - 40:07	<b>Chan, Christopher 2022-11-29</b>	00:00:02	Chan_C.22
	40:07 A. This document looks vaguely familiar.		
40:17 - 40:20	<b>Chan, Christopher 2022-11-29</b>	00:00:13	Chan_C.23
	40:17 Q. BY MR. SULLIVAN: I'm sorry. Wait, let's start		
	40:18 with the first one that says "Releases 2019 to present."		
	40:19 A. Yes.		
	40:20 Q. What information is in that tab?		
40:22 - 41:05	<b>Chan, Christopher 2022-11-29</b>	00:00:31	Chan_C.24
	40:22 THE WITNESS: It appears to be the status of		
	40:23 Google Home app releases between 2019 and 2021.		
 T130.4	40:24 Q. BY MR. SULLIVAN: All right. Let's go to the		
	40:25 next tab which says: "US install events (2019 to		
	41:01 present)."		
 T130.4.1	41:02 Do you see that tab?		
	41:03 A. I do.		
	41:04 Q. Okay. What information is being captured in		
	41:05 this tab of the Exhibit 1263?		
41:08 - 41:09	<b>Chan, Christopher 2022-11-29</b>	00:00:06	Chan_C.25
	41:08 THE WITNESS: It would appear to be install		
	41:09 events of the Google Home app by country.		
60:05 - 60:06	<b>Chan, Christopher 2022-11-29</b>	00:00:04	Chan_C.26
	60:05 Q. BY MR. SULLIVAN: Okay. Let's take a look at		
 T138.2	60:06 Exhibit 1271, please. And there are a lot of tabs here		
60:07 - 60:10	<b>Chan, Christopher 2022-11-29</b>	00:00:12	Chan_C.27
	60:07 so I want to make sure you click over to the -- to see		

## Chan\_C - As Played in Court 5/16/23

DESIGNATION	SOURCE	DURATION	ID
	60:08 all the tabs.		
	60:09 My first question is going to be: Do you		
	60:10 recognize this document?		
60:12 - 60:17	<b>Chan, Christopher 2022-11-29</b>	00:00:20	Chan_C.28
	60:12 THE WITNESS: I don't recognize this document.		
 T138.2.3	60:13 Q. BY MR. SULLIVAN: Let's take a look at the first		
	60:14 tab. It says "GPM First Time Downloads."		
	60:15 Do you see that?		
	60:16 A. I see that.		
	60:17 Q. What does "GPM" refer to?		
60:19 - 60:22	<b>Chan, Christopher 2022-11-29</b>	00:00:09	Chan_C.29
 T138.2.1	60:19 THE WITNESS: It would appear to refer to Google		
	60:20 Play music.		
 T138.2.2	60:21 Q. BY MR. SULLIVAN: And what does "first-time		
	60:22 downloads" refer to?		
60:24 - 61:02	<b>Chan, Christopher 2022-11-29</b>	00:00:15	Chan_C.30
	60:24 THE WITNESS: I'm not familiar with that		
	60:25 concept.		
	61:01 Q. BY MR. SULLIVAN: Do you recollect if a		
	61:02 first-time download is different than an install?		
61:05 - 61:05	<b>Chan, Christopher 2022-11-29</b>	00:00:01	Chan_C.31
	61:05 THE WITNESS: I do not.		
62:13 - 62:14	<b>Chan, Christopher 2022-11-29</b>	00:00:04	Chan_C.32
 T139.2	62:13 Q. BY MR. SULLIVAN: All right. Let's take a look		
	62:14 at Exhibit 1272.		
62:15 - 62:16	<b>Chan, Christopher 2022-11-29</b>	00:00:04	Chan_C.33
	62:15 The first question's going to be: Have you ever		
	62:16 seen this document before?		
62:18 - 62:21	<b>Chan, Christopher 2022-11-29</b>	00:00:17	Chan_C.34
	62:18 THE WITNESS: Insofar as it appears similar to a		
	62:19 prior exhibit.		
	62:20 Q. BY MR. SULLIVAN: Would that prior exhibit be		
	62:21 Exhibit 1263?		
62:24 - 62:24	<b>Chan, Christopher 2022-11-29</b>	00:00:01	Chan_C.35
	62:24 THE WITNESS: Yes.		
63:20 - 63:23	<b>Chan, Christopher 2022-11-29</b>	00:00:13	Chan_C.36
 T139.6.1	63:20 Q. BY MR. SULLIVAN: And if we turn back to		

## Chan\_C - As Played in Court 5/16/23

DESIGNATION	SOURCE	DURATION	ID
	63:21 Exhibit 1272, this appears to be an update of		
	63:22 Exhibit 1263 that goes through November of 2022; is that		
	63:23 right?		
64:01 - 64:06	<b>Chan, Christopher 2022-11-29</b>	00:00:20	Chan_C.37
	64:01 THE WITNESS: Not looking at the specific		
	64:02 numbers, but I see that November 2022 is the last date in		
	64:03 the US Install Events spreadsheet or sheet.		
	64:04 Q. BY MR. SULLIVAN: Okay. Would your answers for		
	64:05 the questions I asked with respect to Exhibit 1263 be the		
	64:06 same for Exhibit 1272?		
64:09 - 64:10	<b>Chan, Christopher 2022-11-29</b>	00:00:05	Chan_C.38
	64:09 THE WITNESS: I can't recall my answers for the		
	64:10 prior spreadsheet.		
64:11 - 64:13	<b>Chan, Christopher 2022-11-29</b>	00:00:19	Chan_C.39
	64:11 Q. BY MR. SULLIVAN: Do you see anything in		
	64:12 Exhibit 1272 that's different from Exhibit 1263 other		
	64:13 than the update from February 2022 to November 2022?		
64:16 - 64:20	<b>Chan, Christopher 2022-11-29</b>	00:00:15	Chan_C.40
	64:16 THE WITNESS: I see no obvious differences in my		
	64:17 current review of the spreadsheet.		
	64:18 Q. BY MR. SULLIVAN: So, again, this is -- this		
	64:19 document is dealing with install events for the Android		
	64:20 version of the Google Home app; correct?		
64:22 - 64:23	<b>Chan, Christopher 2022-11-29</b>	00:00:05	Chan_C.41
	64:22 THE WITNESS: That would appear to be the case		
	64:23 in reviewing the install event sheet.		
67:23 - 67:24	<b>Chan, Christopher 2022-11-29</b>	00:00:02	Chan_C.42
 Clear	67:23 Q. BY MR. SULLIVAN: So smartphones have a		
	67:24 processor; right?		
68:01 - 68:04	<b>Chan, Christopher 2022-11-29</b>	00:00:09	Chan_C.43
	68:01 THE WITNESS: They have at least one processor,		
	68:02 yes.		
	68:03 Q. BY MR. SULLIVAN: Do tablets also have at least		
	68:04 one processor?		
68:06 - 68:09	<b>Chan, Christopher 2022-11-29</b>	00:00:09	Chan_C.44
	68:06 THE WITNESS: Tablets have at least one		
	68:07 processor, yes.		
	68:08 Q. BY MR. SULLIVAN: And how about laptops and		



## Chan\_C - As Played in Court 5/16/23

DESIGNATION	SOURCE	DURATION	ID
	68:09 desktops; do they have at least one processor?		
68:12 - 68:15	<b>Chan, Christopher 2022-11-29</b>	00:00:08	Chan_C.45
	68:12 THE WITNESS: My understanding is that laptops		
	68:13 and desktops also have processors.		
	68:14 Q. BY MR. SULLIVAN: How about Chromebooks; do they		
	68:15 have at least one processor?		
68:17 - 68:20	<b>Chan, Christopher 2022-11-29</b>	00:00:18	Chan_C.46
	68:17 THE WITNESS: In that a Chromebook is a type of		
	68:18 laptop, yes.		
	68:19 Q. BY MR. SULLIVAN: Is a device with a processor		
	68:20 required to run the Google Home app?		
68:23 - 68:25	<b>Chan, Christopher 2022-11-29</b>	00:00:07	Chan_C.47
	68:23 THE WITNESS: I believe so.		
	68:24 Q. BY MR. SULLIVAN: Is a device with a processor		
	68:25 required to run the YouTube apps?		
69:02 - 69:02	<b>Chan, Christopher 2022-11-29</b>	00:00:02	Chan_C.48
	69:02 THE WITNESS: That is my understanding, yes.		
69:21 - 69:22	<b>Chan, Christopher 2022-11-29</b>	00:00:02	Chan_C.49
	69:21 Q. BY MR. SULLIVAN: So smartphones have memory;		
	69:22 right?		
69:24 - 70:01	<b>Chan, Christopher 2022-11-29</b>	00:00:05	Chan_C.50
	69:24 THE WITNESS: Smartphones do have memory, yes.		
	69:25 Q. BY MR. SULLIVAN: So do tablets and computers;		
	70:01 right?		
70:04 - 70:04	<b>Chan, Christopher 2022-11-29</b>	00:00:02	Chan_C.51
	70:04 THE WITNESS: That is my understanding, yes.		
71:12 - 71:13	<b>Chan, Christopher 2022-11-29</b>	00:00:04	Chan_C.52
	71:12 Q. BY MR. SULLIVAN: Have you ever installed any		
	71:13 apps onto a Pixel tablet?		
71:15 - 71:15	<b>Chan, Christopher 2022-11-29</b>	00:00:01	Chan_C.53
	71:15 THE WITNESS: I have.		
73:12 - 73:14	<b>Chan, Christopher 2022-11-29</b>	00:00:05	Chan_C.54
	73:12 Q. BY MR. SULLIVAN: Okay. What's your definition		
	73:13 of memory?		
	73:14 A. So --		
73:16 - 73:18	<b>Chan, Christopher 2022-11-29</b>	00:00:12	Chan_C.55
	73:16 THE WITNESS: There is short-term memory, which		

## Chan\_C - As Played in Court 5/16/23

DESIGNATION	SOURCE	DURATION	ID
	73:17 is represented or used as RAM, and long-term memory, 73:18 which is more storage space.		
75:18 - 75:19	<b>Chan, Christopher 2022-11-29</b>	00:00:06	Chan_C.56
	75:18 Q. BY MR. SULLIVAN: Do all smartphones and tablets 75:19 and computers have a storage system?		
75:22 - 76:01	<b>Chan, Christopher 2022-11-29</b>	00:00:26	Chan_C.57
	75:22 THE WITNESS: I'm not entirely sure. 75:23 Q. BY MR. SULLIVAN: How about smartphones, 75:24 tablets, and laptops where the Google Home app or one of 75:25 the YouTube apps can be installed; do they have a storage 76:01 system?		
76:04 - 76:05	<b>Chan, Christopher 2022-11-29</b>	00:00:05	Chan_C.58
	76:04 THE WITNESS: Most phones, tablets, and laptops 76:05 I've seen have storage.		
78:18 - 78:21	<b>Chan, Christopher 2022-11-29</b>	00:00:11	Chan_C.59
	78:18 Q. BY MR. SULLIVAN: Yeah. I'm just talking about 78:19 the Google Home app and the YouTube apps. When you 78:20 install those on a computing device, they're stored on 78:21 the computing device; right?		
78:23 - 78:23	<b>Chan, Christopher 2022-11-29</b>	00:00:02	Chan_C.60
	78:23 THE WITNESS: Often, they are.		
80:06 - 80:08	<b>Chan, Christopher 2022-11-29</b>	00:00:09	Chan_C.61
	80:06 So, again, going back to my original question: 80:07 When it's installed, these apps are stored on the 80:08 computing devices; right?		
80:11 - 80:12	<b>Chan, Christopher 2022-11-29</b>	00:00:04	Chan_C.62
	80:11 THE WITNESS: I think so, but I'm not entirely 80:12 confident on that assertion.		
90:16 - 90:18	<b>Chan, Christopher 2022-11-29</b>	00:00:09	Chan_C.63
	90:16 Does Google instruct users to download the 90:17 Google Home app onto their computing devices in order to 90:18 set up and use Google's speakers?		
90:22 - 91:05	<b>Chan, Christopher 2022-11-29</b>	00:00:32	Chan_C.64
	90:22 THE WITNESS: When setting up a smart speaker, 90:23 there is a quick-start guide in the packaging that 90:24 instructs users to set up and download the Google Home 90:25 app. And then in addition to that, when they plug in a		

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DESIGNATION	SOURCE	DURATION	ID
	91:01 speaker, the Google assistant's voice also instructs		
	91:02 users to download the Google Home app.		
	91:03 Q. BY MR. SULLIVAN: Does the Google Home app need		
	91:04 to be downloaded onto users' computer devices in order to		
	91:05 set up and use Google's speakers?		
91:08 - 91:11	<b>Chan, Christopher 2022-11-29</b>	00:00:14	Chan_C.65
	91:08 THE WITNESS: Access to the Home app is required		
	91:09 to set up a Google smart speaker.		
	91:10 Q. BY MR. SULLIVAN: Is the Google Home app		
	91:11 required to create a speaker group?		
91:13 - 91:16	<b>Chan, Christopher 2022-11-29</b>	00:00:16	Chan_C.66
	91:13 THE WITNESS: Yes. The Google Home app is		
	91:14 required to create a static speaker group.		
	91:15 Q. BY MR. SULLIVAN: Does Google encourage people		
	91:16 to download the Google Home app?		
91:19 - 91:21	<b>Chan, Christopher 2022-11-29</b>	00:00:09	Chan_C.67
	91:19 THE WITNESS: So both the quick-start guide and		
	91:20 the smart speaker itself both prompt the user to download		
	91:21 and install the Home app to set it up.		
98:13 - 98:14	<b>Chan, Christopher 2022-11-29</b>	00:00:04	Chan_C.68
	98:13 Q. BY MR. SULLIVAN: Does Google provide		
	98:14 instructions on how to use the Google Home app?		
98:17 - 98:20	<b>Chan, Christopher 2022-11-29</b>	00:00:08	Chan_C.69
	98:17 THE WITNESS: I'm aware of support materials for		
	98:18 the Google Home app.		
	98:19 Q. BY MR. SULLIVAN: What support materials are		
	98:20 those?		
98:22 - 98:25	<b>Chan, Christopher 2022-11-29</b>	00:00:06	Chan_C.70
	98:22 THE WITNESS: I'm aware of online support		
	98:23 materials.		
	98:24 Q. BY MR. SULLIVAN: Can you tell me what those		
	98:25 are?		
99:02 - 99:04	<b>Chan, Christopher 2022-11-29</b>	00:00:08	Chan_C.71
	99:02 THE WITNESS: I'm generally aware of online		
	99:03 support materials that allow you to search for specific		
	99:04 features supported by the Google Home app.		
107:12 - 107:14	<b>Chan, Christopher 2022-11-29</b>	00:00:07	Chan_C.72
	107:12 Q. BY MR. SULLIVAN: Okay. So it's your		

## Chan\_C - As Played in Court 5/16/23

DESIGNATION	SOURCE	DURATION	ID
	107:13 understanding, just to circle back, that Google does not		
	107:14 compete with Sonos in the home audio market; right?		
107:16 - 107:18	<b>Chan, Christopher 2022-11-29</b>	00:00:06	Chan_C.73
	107:16 THE WITNESS: I don't view them as directly		
	107:17 competitive. I understand that there is some overlapping		
	107:18 functionality.		
109:03 - 109:04	<b>Chan, Christopher 2022-11-29</b>	00:00:05	Chan_C.74
	109:03 Q. Okay. And you're saying the Sonos 1 doesn't		
	109:04 compete with any of Google's smart speakers?		
109:06 - 109:20	<b>Chan, Christopher 2022-11-29</b>	00:01:09	Chan_C.75
	109:06 THE WITNESS: I can see that for some -- some		
	109:07 users, they might be deciding between Sonos 1 and Nest		
	109:08 Audio, but the price points are quite different, and		
	109:09 ultimately, they are different ecosystems. So I don't		
	109:10 know how much of a competition it actually is.		
	109:11 Q. BY MR. SULLIVAN: What do you mean they're in		
	109:12 different ecosystems?		
	109:13 A. So what I mean by that is the Sonos devices are		
	109:14 in the Sonos ecosystem and that Nest smart speakers are		
	109:15 in the Nest ecosystem.		
	109:16 Q. What do you mean by the term "ecosystem"?		
	109:17 A. By "ecosystem," I mean a set of devices under		
	109:18 the same brand.		
	109:19 Q. Does the ecosystem affect what speaker a user		
	109:20 purchases?		
109:23 - 110:02	<b>Chan, Christopher 2022-11-29</b>	00:00:18	Chan_C.76
	109:23 THE WITNESS: I think that's the hope, but I		
	109:24 haven't seen much data in regards to the Nest ecosystem.		
	109:25 Q. BY MR. SULLIVAN: So if somebody buys a Nest		
	110:01 speaker, they become part of the Nest ecosystem; is that		
	110:02 right?		
110:05 - 110:09	<b>Chan, Christopher 2022-11-29</b>	00:00:12	Chan_C.77
	110:05 THE WITNESS: That's the intent, but I haven't		
	110:06 seen strong data to support it.		
	110:07 Q. BY MR. SULLIVAN: If someone buys a Sonos		
	110:08 speaker, then they would be in the Sonos ecosystem;		
	110:09 right?		
110:11 - 110:15	<b>Chan, Christopher 2022-11-29</b>	00:00:17	Chan_C.78
	110:11 THE WITNESS: That sounds right.		

## Chan\_C - As Played in Court 5/16/23

DESIGNATION	SOURCE	DURATION	ID
	110:12 Q. BY MR. SULLIVAN: And if they're in the Nest 110:13 ecosystem, when they buy their second speaker, they'd 110:14 likely purchase a Nest speaker for that second speaker; 110:15 right?		
110:17 - 110:22	<b>Chan, Christopher 2022-11-29</b>  110:17 THE WITNESS: That's the hope, but I haven't 110:18 seen strong data that suggests the narrative that you are 110:19 describing. 110:20 Q. BY MR. SULLIVAN: Well, are you aware of anyone 110:21 buying a Nest speaker and then turning around and buying 110:22 a Sonos speaker as a second speaker?	00:00:19	Chan_C.79
110:24 - 111:01	<b>Chan, Christopher 2022-11-29</b>  110:24 THE WITNESS: I'm sure they exist. 110:25 Q. BY MR. SULLIVAN: You're sure they exist, but I 111:01 thought you said that they don't compete; right?	00:00:11	Chan_C.80
111:03 - 111:09	<b>Chan, Christopher 2022-11-29</b>  111:03 THE WITNESS: Yes, that that was my like general 111:04 view about competition. 111:05 Q. BY MR. SULLIVAN: So Google and Sonos don't 111:06 compete, but you're aware of the fact that somebody that 111:07 bought a Google speaker as a first speaker may buy a 111:08 Sonos speaker as a second speaker. 111:09 Did I get that right?	00:00:28	Chan_C.81
111:11 - 111:13	<b>Chan, Christopher 2022-11-29</b>  111:11 THE WITNESS: I was saying I'm sure they 111:12 probably exist, but I have not seen concrete data to that 111:13 effect.	00:00:07	Chan_C.82
111:25 - 112:01	<b>Chan, Christopher 2022-11-29</b>  111:25 THE WITNESS: Well, I don't know if I agree with 112:01 that.	00:00:03	Chan_C.83
112:05 - 112:06	<b>Chan, Christopher 2022-11-29</b>  112:05 THE WITNESS: I'm not willing to make that 112:06 claim.	00:00:04	Chan_C.84
113:07 - 113:19	<b>Chan, Christopher 2022-11-29</b>  113:07 Q. BY MR. SULLIVAN: No. Okay. What's your 113:08 definition of competition? 113:09 A. So I think of competition as when a person is 113:10 considering a specific product, they have a number of	00:00:46	Chan_C.85

**Chan\_C - As Played in Court 5/16/23**

DESIGNATION	SOURCE	DURATION	ID
	113:11 options in kind of a competitive set, and they narrow in		
	113:12 on the options and then ultimately pick one. Whatever		
	113:13 those options were, were competitors.		
	113:14 Q. Okay. So using that definition of competition,		
	113:15 I'll go back to my original question.		
	113:16 Well, let me phrase the question this way.		
	113:17 Using that definition of competition, does Google compete		
	113:18 with Sonos in either the home audio market or the smart		
	113:19 speaker market?		
113:21 - 113:24	<b>Chan, Christopher 2022-11-29</b>	00:00:11	Chan_C.86
	113:21 THE WITNESS: I think the answer depends.		
	113:22 Q. BY MR. SULLIVAN: How does it depend?		
	113:23 A. It depends on whether we're talking about home		
	113:24 audio or smart speaker.		
115:23 - 115:24	<b>Chan, Christopher 2022-11-29</b>	00:00:10	Chan_C.87
	115:23 Your knowledge about whether Google and Sonos		
	115:24 compete in the home audio market, what is that based on?		
115:25 - 116:17	<b>Chan, Christopher 2022-11-29</b>	00:01:01	Chan_C.88
	115:25 A. It's based on some level of reviews and		
	116:01 reviewing those.		
	116:02 Q. What reviews?		
	116:03 A. Sometimes people write reviews when we launch		
	116:04 our products.		
	116:05 Q. And what do they say in those reviews that would		
	116:06 help you determine whether Google competes with Sonos in		
	116:07 the home audio market?		
	116:08 A. Sometimes they'll reference Sonos products in		
	116:09 those reviews.		
	116:10 Q. And these are reviews of your products?		
	116:11 A. I think I've seen them before, yes.		
	116:12 Q. Okay. So people are -- are reviewing your		
	116:13 product and mentioning Sonos' products; is that what		
	116:14 you're saying?		
	116:15 A. They will mention other products as well.		
	116:16 Q. Wouldn't that indicate that there's competition		
	116:17 between the two?		
116:19 - 116:20	<b>Chan, Christopher 2022-11-29</b>	00:00:06	Chan_C.89
	116:19 THE WITNESS: That would indicate that the		
	116:20 reviewer sees some level of competition between the two.		

**Chan\_C - As Played in Court 5/16/23**

DESIGNATION	SOURCE	DURATION	ID
117:22 - 117:24	<b>Chan, Christopher 2022-11-29</b> 117:22 Q. BY MR. SULLIVAN: And do you -- do you believe 117:23 that Google competes with Sonos in the smart speaker 117:24 market? Again, I'm using your definition of competition.	00:00:10	Chan_C.90
118:01 - 118:02	<b>Chan, Christopher 2022-11-29</b> 118:01 THE WITNESS: In certain cases, I believe there 118:02 is some competition, yes.	00:00:04	Chan_C.91
125:11 - 125:12	<b>Chan, Christopher 2022-11-29</b> 125:11 Q. BY MR. SULLIVAN: Do you have any idea of 125:12 whether Google's smart speakers are profitable?	00:00:04	Chan_C.92
125:14 - 125:16	<b>Chan, Christopher 2022-11-29</b> 125:14 THE WITNESS: Not really. 125:15 Q. BY MR. SULLIVAN: Would Google sell a product 125:16 that wasn't profitable?	00:00:08	Chan_C.93
125:18 - 125:22	<b>Chan, Christopher 2022-11-29</b> 125:18 THE WITNESS: I can't speak to the hypothetical, 125:19 but I can say that Google encourages all of our hardware 125:20 products to be run sustainably. 125:21 Q. BY MR. SULLIVAN: And how does Google make money 125:22 from its smart speakers?	00:00:16	Chan_C.94
125:24 - 125:25	<b>Chan, Christopher 2022-11-29</b> 125:24 THE WITNESS: I don't know that Google makes 125:25 money from its smart speakers.	00:00:03	Chan_C.95

Sonos Affirmatives	00:19:12
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Google Counters	00:00:56
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<b>TOTAL RUN TIME</b>	<b>00:20:07</b>
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Documents linked to video:

T128

T130

T138

T139